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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known						
Application Number	10/725,888					
Filing Date	December 2, 2003					
First Named Inventor	William J. Borland					
Art Unit	2841					
Examiner Name	HOA C. NGUYEN					
Attorney Docket Number	FL0497 US NA					

					DOCUMENTS	
Examiner Initials*	Cite No.	}	Document Number umber-Kind Code ^{2 (f known)}	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
ten		US-	4,190,854	02-26-1980	Redfern	
HA		US-	6,317,023	11-13-2001	Felten	
JW.		US-	6,631,551	10-14-2003	Bowles et al.	
JeW		US-	2002/0179329 A1	12-05-2002	Fukuoka et al.	
ter		US-	2003/0154592 A1	08-21-2003	Felten	
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		FORE	IGN PATENT DOCU	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code ³ "Number ⁴ "Kind Code ³ (if known)	MM-DD-YYYY		Or Relevant Figures Appear	Te
		JP 2003-92460	05-31-2002			
		JP 2-153589	06-13-1990	Ibiden KK		
		JP 2001-168491	12-09-1999			
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Examiner 06 Signature Considered

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Applicant is to place a check mark here if English language Translation is attached.

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Substitute for fo	THE PROPERTY OF	/		Complete if Known			
				Application Number	10/725,888		
INFOR	I NOITAN	DISCLO	SURE	Filing Date	December 2, 2003		
STATE	MENT BY	' APPLI	CANT	First Named Inventor	William J. Borland		
			•	Art Unit	2841		
(U	se as many sheets	as necessary))	Examiner Name	HOA C. NGUYEN		
Sheet	2	of	Λ	Attorney Docket Number	EL0497 US NA		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
tew		JOHN FELTEN AND SAUL FERGUSON, Embedded Ceramic Resistors and Capacitors for PWB, IP Printed Circuit Expo, San Diego, CA, April 2000.	
		JOHN J. FELTEN AND SAUL FERGUSON, Ceramic Resistors and Capacitors Embedded in PWB, IPC, San Diego, April 5, 2000.	
		JOHN J. FELTEN AND SAUL FERGUSON, Ceramic Resistors and Capacitors Embedded in PWB, IMAPS, Denver, April 29, 2000.	
		JOHN J. FELTEN AND WILLIAM J. BORLAND, Embedded Ceramic Passives in PWB: Process Development, IPC Printed Circuit Expo, Anaheim, CA, April 2001.	
		JOHN J. FELTEN AND WILLIAM J. BORLAND, Ceramic Resistors and Capacitors Embedded in PWB's, IPC Expo, April 3, 2001.	
		WILLIAM BORLAND, Designing for Embedded Passives, Printed Circuit Design, August 2001.	
	1.6		

Hoavary Examiner Date Signature Considered

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Substitute for for	m 1449B/PTO	منتخنية			Complete if Known
				Application Number	10/725,888
INFORM	I NOITAN	DISCLO	SURE	Filing Date	December 2, 2003
STATEMENT BY APPLICANT				First Named Inventor	William J. Borland
				Art Unit	2841
· (U:	e as many sheets	as necessary)		Examiner Name	HOA C NGUYEN
Sheet	3	of	4	Attorney Docket Number	EL0497 US NA .

		NON PATENT LITERATURE DOCUMENTS								
Examiner Initials*	Cite No.1									
HU		WILLIAM BORLAND, JOHN J. FELTEN, Thick Film Ceramic Capacitors and Resistors inside Printed Circuit Boards, 34th International Symposium on Microelectronics (IMAPS), Oct. 9-11th, 2001, Baltimore, MD.								
	***************************************	JOHN FELTEN, RICHARD SNOGREN, JIMING ZHOU, Embedded Ceramic Resistors and Capacitors in PWB: Process and Performance, Fall IPC Meeting, October 11, 2001, Orlando, FL.								
		WILLIAM J. BORLAND AND SAUL FERGUSON, Embedded Passive Components in Printed Wiring Boards, a Technology Review, To be published in CircuiTree Magazine, 2001.								
		JIMING ZHOU, JOHN D. MYERS AND JOHN J. FELTEN, Embedded Passives Technology for PCBs: Materials, Design, and Process, IMAPS 2002 Conference, Denver, CO, Sept. 4-6, 2002.								
		JOHN J. FELTEN, Electronic Circuits World Convention, Paper number IPC31, Advanced Embedded Passives Technologies - Putting Ceramic Components into Organic PWBs.								
		WILLIAM BORLAND, JOHN J. FELTEN, SAUL FERGUSON, ALTON B. JONES AND ANGELA A. LAWRENCE, Embedded Singulated Ceramic Passives in Printed Wiring Boards, IMAPS Advanced Technology Workshop on Passive Integration, Ogunquit, ME, June 19-21, 2002.								
Examiner	10	THE Date 14 T/KC								

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	Substitute f	or form 1449B/PTO				Complete if Known
					Application Number	10/725,888
	INFO	RMATION D	ISCLO	SURE	Filing Date	December 2, 2003
	STA	TEMENT BY	APPLI	CANT	First Named Inventor	William J. Borland
					Art Unit	2841
		(Use as many sheets	as necessary)		Examiner Name	HOA C. NGUYEN
$\overline{}$	Sheet	4	of	4	Attorney Docket Number	

		NON PATENT LITERATURE DOCUMENTS						
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposlum, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.						
Hlh		DR. KIM FJELDSTED AND STACEY L. CHASE, EMBEDDED PASSIVES: LASER TRIMMED RESISTORS, CIRCUITREE, Volume 70, March 2002.						
Examiner Signature	H	oweques Date Considered 4/5/06						

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